

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Method for the preparation of a polymeric support matrix having particulate material entrapped in said support matrix in which the polymeric support matrix is porous and the particles are well accessible and maintain their functionality after preparation, said method comprising providing a mixture of polymeric material and particulate material in a solvent for the polymeric material and extruding said mixture into a fibre and solidifying said fibre by a two-step phase inversion process,

wherein the two-step phase inversion process comprises:

(i) utilizing a spinneret to allow a controlled flow of a liquid, ~~a vapor or a gas mixture~~ comprising a solvent and a non-solvent for said polymeric material, or a gas stream comprising a nonsolvent for the polymeric material, along parallel to an exterior medium of the nascent fibre, thus adjusting the porosity and pore size of the outer wall of the nascent fibre, resulting in a first phase separation of the exterior of the nascent fiber; and

(ii) entering of said fiber into a coagulation bath, resulting in further phase separation and arrest of the structure of said fiber,

to obtain a hollow or solid fiber containing about 60-95 wt% of particulate material.

2. (Original) Method according to claim 1 in which the mixture that is extruded comprises 0.5% to 50% by weight polymeric material and 1% to 95% by weight particulate material, the remainder being solvent.

3. (Currently Amended) Method according to claim 1 in which the solvent ~~used~~ is selected from the group consisting of N-methyl-pyrrolidone (NMP), dimethyl acetamide (DMAc), dimethylformamide (DMF), dimethylsulfoxide (DMSO), tetrahydrofuran (THF), ϵ -caprolactam ~~or~~ and 4-butyrolactone.

4. (Previously Presented) Method according to claim 3 in which the solvent in the mixture of polymeric material and particulate material is replaced by 0.01-50% by weight of one or more additives and/or non-solvents.

5. (Currently Amended) Method according to claim 4 in which the additives are selected from the group consisting of octanol, polyvinylpyrrolidone (PVP), polyethylene glycol (PEG), and glycerol.

6. (Canceled)

7. (Previously Presented) Method according to claim 1 in which the fibre comprises about 60-70% by weight of particulate material.

8. (Canceled)

9. (Previously Presented) Method according to claim 1 in which the exterior medium is a liquid mixture of solvent and nonsolvent for the polymer.

10. (Previously Presented) Method according to claim 1 in which the exterior medium is a gas stream comprising a nonsolvent for the polymer.

11. (Previously Presented) Method according to claim 9 in which the nonsolvent is water or water vapor.

12. (Previously Presented) Method according to claim 1 in which the spinneret is a triple layer spinneret.

13. (Currently Amended) Method according to claim 1 in which the polymeric material is selected from the group consisting of polyethersulphone, polysulfone, polyethylene-co-vinylalcohol, polyvinylidene fluoride and cellulose acetate.

14. (Previously Presented) Method according to claim 1 in which the particulate material in the porous matrix is altered in its function by a subsequent functionalisation.

15. (Previously Presented) Method according to claim 1 in which the particulate material is adsorptive particulate material.

16. (Previously Presented) Method according to claim 1 in which the adsorptive particulate material is an ion exchange resin.

17. (Original) Method according to claim 16 in which the adsorptive particulate material is hydrophobic in nature.

18. (Previously Presented) Method according to claim 1 in which the particulate material is used for size exclusion.

19. (Previously Presented) Method according to claim 1 in which the particulate material is used for separation of isomeric compounds.

20. (Previously Presented) Method according to claim 1 in which the particulate material is used for separation of optically active compounds.

21. (Previously Presented) Method according to claim 1 in which the particulate material is used in reversed phase chromatography.

22. (Previously Presented) Method according to claim 1 in which the particulate material is functionalised, or is subsequently functionalised, with a catalyst or a biocatalyst.

23. (Previously Presented) Method according to claim 1 in which the particulate material is active carbon.

24. (Currently Amended) Method according to claim 1 in which for mechanical enforcement a thread, wire, or yarn ~~or the like of any material~~ is co-extruded with the fibre.

25. (Previously Presented) Method according to claim 1 which further comprises heat treatment.

26. (Previously Presented) Method for controlling porosity of a polymeric matrix having particulate material entrapped in said matrix by varying the size of the particulate material in the method according to claim 1.

27. (Previously Presented) Method for controlling porosity of a polymeric matrix having particulate material entrapped in said matrix by varying the content by weight of the particulate material in the polymeric matrix in the method according to claim 1.

28. (Original) Method for controlling porosity of a polymeric matrix having particulate material entrapped in said matrix by varying the functionality of the particulate material in the method according to claim 1.

29. (Previously Presented) Fibre obtained by the method according to claim 1.

30. (Previously Presented) Module comprising fibre according to claim 29, said module comprising a spirally wound fiber mat packed inside a housing, a bundle of fibers packed longitudinally inside a housing, a transverse flow fiber configuration inside a housing, fibre wounded as a spool in parallel or cross-over mode inside a housing or an orderly or disorderly fibre packing configuration inside a housing.

31. (Original) Body comprising a fibre, optionally in a finely divided form, according to claim 29.

32. (Previously Presented) A method for the adsorption and/or purification of compounds from a mixture of compounds or a reaction mixture comprising utilizing a fiber according to claim 29.

33. (Previously Presented) A method for the immobilization of a catalyst in a reaction mixture comprising utilizing a fiber according to claim 29.

34. (Previously Presented) A method for the immobilization of a chemical or biological compound comprising utilizing a fiber according to claim 29.

35. (Previously Presented) The method according to claim 32, wherein the mixture of compounds or the reaction mixture is a fermentation broth, a tissue broth, a plant broth or a cell broth.

36. (Previously Presented): The method according to claim 1, wherein there is no additional step after (ii).

37. (New): Method for the preparation of a polymeric support matrix having particulate material entrapped in said support matrix in which the polymeric support matrix is porous and the particles are well accessible and maintain their functionality after preparation, said method comprising providing a mixture of polymeric material and particulate material in a solvent for the polymeric material and extruding said mixture into a fibre and solidifying said fibre by a two-step phase inversion process,

wherein the two-step phase inversion process comprises:

(i) utilizing a spinneret to allow a controlled flow of a liquid mixture comprising a solvent and a non-solvent for said polymeric material, along an exterior medium of the nascent fiber, resulting in a first phase separation of the exterior of the nascent fiber; and

(ii) entering of said fiber into a coagulation bath, resulting in further phase separation and arrest of the structure of said fiber,

to obtain a hollow or solid fiber containing about 60-95 wt% of particulate material.